

Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the application.

Listing of claims:

1. (Previously presented) A system enabling a user to ask a question (query) and for providing the user with one or more answers or solutions to such question, the system comprising:

a knowledge base comprising a set of answers having the form S-A-O (subject-action-object), and further comprising links to documents corresponding to the set of answers;

a problem statement generator configured to receive a natural language query from a user apparatus and to automatically generate a problem statement in the form A-O, S-A, S-X-O or S, where S, A and O are query elements in the natural language query, where X indicates absence of a query element;

a server coupled to the knowledge base, the server configured to search the knowledge base using the problem statement to find at least one S-A-O answer, wherein the A and O, or S and A, or S and O or S query elements in the problem statement are also in the at least one S-A-O answer; and

a communication device configured to transmit the at least one answer S-A-O and associated active document links to the user apparatus.

2. (Previously presented) A system as set forth in claim 1, wherein said server is configured to conduct a search of the World Wide Web, identify documents that include new answer S-A-O's each comprising query elements in the problem statement, store links to such documents, and add such new answer S-A-O's to the knowledge base.

3. (Previously presented) A system as set forth in claim 2, wherein said server is also configured to conduct said search automatically in response to the server determining that

no answer S-A-Os exist in the knowledge base comprising the query elements in the problem statement.

4. (Previously presented) A system as set forth in claim 2, wherein said server is programmed to prompt the user for a command to initiate the search of the World Wide Web.

5. (Previously presented) A system as set forth in claim 1, wherein the user apparatus converts human voice signals into said problem statement.

6. (Previously presented) A system as set forth in claim 1, wherein the user apparatus converts the at least one answer S-A-O into audio signals.

7. (Previously presented) A system as set forth in claim 1, wherein said user apparatus includes voice-to-text and text-to-voice recognition capability and a client software module including the problem statement generator.

8. (Previously presented) A system as set forth in claim 1, wherein said user apparatus includes a user digital computer for generating said problem statement and receiving said at least one answer S-A-O.

9. (Original) A system as set forth in claim 8, wherein said user apparatus further includes at least one user input device that includes a human voice to signal converter or a keyboard.

10. (Original) A system as set forth in claim 8, wherein said user apparatus further includes at least one user input device that includes a signal to audio converter or a visual display monitor.

11. (Previously presented) A system as set forth in claim 1, wherein each of the at least one answer S-A-Os is represented in a sentence format.

12. (Previously presented) In a digital computing system, a method enabling a user to input a question (query) and providing the user with one or more answers or solutions to such query, the method comprising:

receiving a natural language user query that includes one or more query elements in the form of A-O, S-A, S-X-O, or S, where X indicates absence of a query element;

providing a knowledge base of semantically and automatically processed information including a set of answers in the form of S-A-O's (subject-action-object), and further comprising active links to documents corresponding to the set of answers;

automatically generating a problem statement in the form A-O, S-A, S-X-O or S from the natural language query, where S, A and O are query elements in the natural language query;

using the problem statement, identifying in the knowledge base at least one answer S-A-O, wherein the A and O, or S and A, or S and O, or S query elements in the problem statement are also in the at least one S-A-O answer; and

transmitting signals representative of the at least one answer S-A-O to the user apparatus.

13. (Previously presented) A method as set forth in claim 12, further comprising searching the World Wide Web, identifying documents that include new answer S-A-O's each comprising query elements in the problem statement, storing links to such documents, and adding such new answer S-A-O's to the knowledge base.

14. (Previously presented) A method as set forth in claim 13, including initiating said searching automatically in response to determining that no answer S-A-Os exist in the knowledge base that include the query elements in the problem statement.

15. (Previously presented) A method as set forth in claim 13, further including prompting the user for a command to initiate the searching of the World Wide Web.

16. (Previously presented) A method as set forth in claim 12, further comprising converting human voice signals into said problem statement.

17. (Previously presented) A method as set forth in claim 12, further comprising converting the at least one answer S-A-O into audio signals or visual display.

18. (Previously presented) A method as set forth in claim 12, wherein generating the problem statement includes converting voice-to-text.

19. (Previously presented) A method as set forth in claim 17, wherein generating the audio signals or visual display includes converting text-to-audio or voice-to-text.

20. (Previously presented) A method of providing one or more solutions in response to a user query, the method comprising:

providing a knowledge base of semantically and automatically processed information including a set of answers in the form of S-A-O's (subject-action-object), and further comprising active links to documents corresponding to the set of answers;

processing a natural language user query at a user device, including generating a problem statement in the form A-O, S-A, S-X-O or S from the natural language user query, where S, A and O are query elements in the natural language query and X indicates absence of a query element, converting the problem statement into a URL query, and sending the URL query to a semantic server having access to the knowledge base;

generating a knowledge base query from the URL query at the semantic server and searching the knowledge base for one or more S-A-O solutions associated with the problem statement, and if the one or more S-A-O solutions are found, converting the one

or more S-A-O solutions into at least one HTML page and sending the at least one HTML page to the user device; and

processing the at least one HTML page at the user device to output the one or more S-A-O solutions to the user query.